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Deepest Tissues

Nutrition in wound management





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Publishing information

DeepesTissues publishing schedule 2019

Please find below the issue theme, submission deadlines and anticipated publication dates. Submissions before the deadline are welcome and highly encouraged! Please contact your editor, Elfi Ashcroft, at newsletter@woundsaustralia.com.au if you require further information.

Issue	Theme	Submission deadline
JUNE	Wound management – an evolving specialty?	3 May 2019
SEPTEMBER	Diabetes and wounds	2 August 2019
DECEMBER	Biofilm – a year in retrospect	1 November 2019



Guest editorial

Emma Monroe
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Why nutrition matters

Nutrition is sometimes an overlooked and undervalued commodity of the healthcare system. Healthcare professionals involved in wound management know that suboptimal nutrition and hydration can affect wound healing and skin integrity. What may be less well known is that serum vitamin D deficiency has been demonstrated to not just be an independent predictor for falls and functional decline, but also a risk factor for pressure injuries and venous ulcers (Flicker et al., 2003; Otero et al., 2019; Quain & Khardori, 2015; Mei et al., 2007).

Vitamin D

Vitamin D induces a wound healing antimicrobial peptide, cathelicidin, which is used by the immune system to protect against and fight infection. Vitamin D also aids in the initiation of the normal healing process which maintains epithelial cell integrity (Quain & Khardori, 2015; Otero et al., 2019; Collins, 2011).

Approximately 90% of our vitamin D requirements are obtained by exposure to sunlight. As we age, our skin

becomes up to 70% less effective in converting sunlight to vitamin D. Other factors affecting conversion are skin tone, use of sunscreen, latitude and season (Mei et al., 2007; Byrd-Bredbenner et al., 2013).

Vitamin D₂ (ergocalciferol)

Vitamin D₂ is found in food and supplements. Dietary sources include oily fish, cod liver oil, and fortified foods (some milk and milk products, margarines and breakfast cereals) (Byrd-Bredbenner et al., 2013; Mei et al., 2007; Stroud et al., 2008; Nowson, 2002).

Vitamin D₃ (cholecalciferol)

Vitamin D₃ is made by the body naturally when our skin is exposed to ultraviolet light from a precursor for cholesterol (7-dehydrocholesterol). A chemical transformation allows the precursor to enter the bloodstream, where it is transported to the liver and kidney and converted to its active form (calcitriol), which can be stored in our body for up to 6 months.